THE IMPACT OF PRESIDENT BUSH'S BUDGET ON THE UTAH AGRICULTURAL EXPERIMENT STATION ELIMINATION OF HATCH, McINTIRE-STENNIS AND ANIMAL HEALTH FUNDS February 2005

The impact of the proposed President's Budget for the coming year on the Utah Agricultural Experiment Station, the state of Utah and Utah State University would be devastating! I address the impact in a general way and then move to specifics that a reduction of the UAES budget by approximately \$2 million (federal funds only) would have.

Hatch and McIntire-Stennis funds were intended in the original legislation to support the concept of Land Grant Universities to provide for the education of ALL Americans, should they desire it in agriculture and the mechanical arts and subsequently expanding to education in fine arts and other areas. The educational opportunities that were accepted by all economic classes of Americans led to a nation that, in a relatively short period of time positioned itself as second to none. IT WAS BUILT ON A FOUNDATION OF AGRICULTURE, FOREST PRODUCTS AND THE ENVIRONMENT. The education of America created an attitude of preserving productive land rather than the attitude of the uneducated around the world to "slash and burn" and then move on.

The complexity of the problems faced in both the rural and urban sectors of America increase almost exponentially each year. Why then, does it make sense to cut the very foundation of the success of this country by eliminating the underpinnings of research that allows America to continue to be an economic force and the envy of the world with agriculture being an integral part of that strong foundation?

We are successful in the agriculture sector of the economy because we have invested in plant and animal breeding. The new material has kept us ahead of disease variants, as they mutate quickly. Some plant breeding programs take up to 20 years from first cross to release of a new variety. The new variety may only last 5 years before mutated disease makes it unusable. This area of research never has been funded by competitive grants and never will be due to the length of time to success. Plant and animal breeding research will not fit into the relatively short frame work of competitive grants, it must be funded as an underpinning of agricultural research and education.

Experiment Station research with formula funds have allowed our scientists to be successful in the competitive grants arena. Formula funds have returned more than \$30 for every dollar invested. The formula funds have been matched by state funds so that doubles the value of the investment by the federal government. The loss of federal funds would likely result in most state legislatures eliminating the match. This does not take into account the investment by the private sector in innovations that come from Land Grant Universities. The results of research from Land Grant Universities has always been provided openly to the population of the United States and the world is a better place because of it. If the same research would have been done by the private sector it would be proprietary and therefore available to only those willing to pay for it.

The closing down of Experiment Stations, which would likely happen if Hatch, McIntire-Stennis and Animal Health funds were eliminated, would also impact our universities ability to teach courses all the way across the breadth of the university. At Utah State if we lost all the faculty who receive salary support from Formula funds the university would be unable to teach many of its current courses. The number of faculty members supported by the UAES who also teach is approximately 140. They teach 373 classes with about 9500 student credit hours each year. These faculty members are located in every college at Utah State University. If the Hatch and McIntire-Stennis funds are cut many of these faculty members would have to leave or have their appointments changed. The appointment change would result in other faculty members without tenure being terminated to make room for the tenured faculty currently on UAES funds.

The departments and the range of impact are given in the following table:

Department	# of faculty impacted	Dollars lost and source	% Salary range or operating on fed funds
Animal Dairy and Veterinary Science	13 3 2	\$230,963 Hatch MS \$18,642 Animal Health \$47,915 Hatch MS	4%–73% Operating Operating
Aquatic, Watershed and Earth Resources	1 1	\$31,658 Mc/Stennis \$7,086 Mc/Stennis	51% Operating
Environment and Society	2 1	\$46,992 Mc/Stennis \$4,625 Mc/Stennis	30%–31% Operating
Forest, Range and Wildlife Sciences	5 5	\$77,493 Mc/Stennis \$5,000 Mc/Stennis	21%–26% Operating
Nat. Resources	1 1	\$9,352 Mc/Stennis \$17,064 Mc/Stennis	8% Operating
Agr. Res. Service	1	\$740 Hatch MS	Operating
Agriculture Systems Technology and Education	1	\$6,638 Hatch MS	12%
Biology	2	\$38,654 Hatch MS	30%-43%
Chemistry	l ī	\$24,456 Hatch MS \$38,061 Hatch MS	. 43% Operating
Economics	4 4	\$65,401 Hatch MS \$47,000 Hatch MS	8%–29% Operating
Nutr. and Food Science	3 1	\$14,888 Hatch MS \$4,550 Hatch MS	8%–10% Operating

Plants, Soils and Biometeorology	6	\$101,288 Hatch MS	8%-75%
Sociology, Social Work and Anthropology	3 1	\$51,207 Hatch MS \$5,500 Hatch MS	15%–27% Operating
UAES General	10	\$36,148 Hatch MS	Travel
Total Multistate		\$713,609	
Animal, Dairy and Veterinary Science	7 1	\$116,349 Hatch \$7,000 Hatch	12%–65% Operating
Agriculture Systems Technology and Educaton	1	\$21,204 Hatch	25%
Biology	8 3	\$267,427 Hatch \$22,500 Hatch	25%–54% Operating
Economics	4 2	\$51,528 Hatch \$28, 281 Hatch	8%-25% Operating
Environment and Society	1	\$33,255 Hatch	39%
Forest, Range and Wildlife Science	1	\$20,688 Hatch	30%
Nutrition and Food Science	3	\$100,298 Hatch	30%–54%
Plants, Soils and Biometeorology	9	\$287,261 Hatch	21%-100%
UAES General	1	\$42,100 Hatch	100%
Total Hatch		\$997,860	
Total Hatch, Mc/Stennis, and Animal Health		\$1,937,010	, , , , , , , , , , , , , , , , , , ,

As can quickly be deduced there would be many faculty with insufficient resources, particularly salary funds to continue to have "hard funded" positions at Utah State University. In addition to the funds listed above the UAES uses state funds to pay for the benefits packages in direct proportion to the salary funds provided. To these departments that are directly impacted by the loss of federal funds other departments that are funded through state resources would likely be impacted by the loss of the state match of federal funds.

The reduction in faculty due to the loss of federal funds would reduce the cohort of faculty that could apply for competitive grant funds. Furthermore, the proposed budget allows for full F&A on USDA competitive grants so the actual money available to the scientists and to the UAES would be reduced another ~16% as the current ceiling for F&A on USDA grant funds is 24%. This reduces even further the funds actually used for research and education from the competitive grants of the USDA.

If the UAES had not had Formula funds over the years such things as all the new small grains cultivars released through USU and grown around the world would not have happened. The surge-flow irrigation system would not have been invented. Quick identification technology of food toxins would have been lost. Cloning of large animals, line source irrigation technology, fruit frost models and the corresponding physiology of change, variety releases with USDA-ARS grasses, clover, alfalfa and other range plants, automated canal irrigation systems, spider lamb syndrome as a genetic deficiency, Smut resistance in small grains, and many other critical discoveries would not have been made. The private sector would not have invested in such research since they look for ways to make money, not release scientific findings for the good of society.

Small states will loose their capacity to operate Experiment Stations if this budget is allowed to go through. It is vital that the programs that brought this country to the enviable position it has, as the world economic leader, not be dismantled when threats to our food, water, animal health and indeed, our very infrastructure need as much science as we can generate. Agriculture and related industries have geographical specificity so the research and extension system of the USDA must continue to work by state and by region if we are going to prevent the United States of America from becoming an importing nation with a huge increase in vulnerability to terrorist acts and wild market swings. This would place us in a position of being unable to control or even influence the products we import. The positive balance of trade that the US has enjoyed in agriculture for many years will continue to be if we continue to invest in the Land Grant System of research and education.

We must stand together to reverse this unwise budget strategy if we are to continue to be the breadbasket of the world with the safest food supply the world has ever known. Our food quantity, quality, diversity, and safety are severely threatened with this budget. The ripple effect of this action will be like a tidal wave destroying our countries food, fiber and social well being. Return the formula funds so the competitive funding programs will have a chance to move us to the next level and keep us in the position as the world leader.